Attorney Docket No. MSU 4.1-643 Appln. Serial No. 10/691,328 Amendment dated June 9, 2006 Reply to Office Action dated April 11, 2006

SPECIFICATION

Please replace the paragraph beginning on page following amended paragraph: 18, 20 with the line η^1 -pyrrolyl molybdenum catalyst (compound 8). As shown in Scheme 1, in the first step bromoethylbenzene (compound reacted with 2-methyl-4-ZnBr-2-butene 1) tetrahydrofuran (THF) solution containing CuBr and bromoethylbenzene to produce (3,3-dimethyl-1pentene) benzene (compound 2). Compound 2 is then reacted with nitric acid/acetic acid/acetic anhydride to produce 2-(3,3-dimethyl-1-pentene)-1-nitrobenzene (compound 3). nitro group is reduced to an amino group in a reduction reaction comprising SnCl₂ and an acid, which produces 2-(3,3-dimethyl-1-pentene)-1-aniline (compound 4).Compound is reacted with ammonium dimolybate $(NH_4Mo_2O_7)$, chlorotrimethylsilane (ClSiMe₃), and triethylamine(NEt₃) in dimethoxyethane (DME) to produce MoCl₂(NAr)₂(dme) (compound 5) which has the structure

Compound $\bf 5$ with neophylyl (nph) MgCl in THF to produce Mo(nph)₂(NAr)₂ (compound $\bf 6$) which has the structure